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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

LOEWE, ROBERT S

ART UNIT	PAPER NUMBER
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1796

NOTIFICATION DATE	DELIVERY MODE
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02/29/2008

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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Office Action Summary	Application No. 10/562,049	Applicant(s) GUENNOUNI ET AL.	
	Examiner Robert Loewe	Art Unit 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>12/23/05</u> . | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Claim Interpretation

For purposes of further examination, the limitation "microgram atoms" of instant claims 11 and 12 have been interpreted to mean or be equivalent to micromoles. The Examiner notes that while the term microgram atoms is not incorrect, it is not as widely used as the more familiar term micromoles.

Claim Objections

Claims 11, 13 and 17 are objected to because of the presence of underlined text. Appropriate correction is required.

Claim 13 is objected to because of the following informalities: the limitation "with or without π participation" does not appear to further limit what ligand(s) L may be. Either a ligand allows for π -participation or it does not. Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 16-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specifically, claim 16 recites the limitations "POS A' or A" " in line 5 and "B' or B" " in line 6. There is insufficient antecedent basis these limitations in the claim. Claims 16-19

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are further rejected because the limitation "in a final stage 3" is not defined. For purposes of suggestion, the final 3 lines of instant claim 16 does not appear to further limit the process of instant claim 16 and could be removed. Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 11 and 13-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dalbe et al. (WO-2002/083778). For convenience, an English translation of this publication provided by the McElroy Translation Company will be relied upon. All citations incorporated herein refer to the English translation.

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Claims 11 and 14-15: Dalbe et al. teaches a single-component polyorganosiloxane composition which is substantially equivalent to instant claim 11. Specifically, Dalbe et al. teaches that the composition comprises a polysiloxane which satisfies the structural and physical limitations of formula I of instant claim 11 (pages 9-10), a polyorganosiloxane resin which may be incorporated in the claimed amounts of instant claim 11 (p. 10), a crosslinking agent which satisfies the structural limitations of formula (II) of instant claim 11 (p. 10), a functionalization catalyst (bottom of p. 18-top of p. 19), a primary aliphatic alcohol (p. 22), at least one unreactive linear polysiloxane which satisfies the structural limitations of formula (III) of instant claim 11 (bottom of p. 10), at least one inorganic filler (p. 11), an auxiliary agent (p. 11). Dalbe et al. therefore explicitly teaches components (i)-(8i) of instant claim 11.

Dalbe et al. further teaches that an effective amount of component (9i) of instant claim 11 is added to the composition. With regards to parameters α and γ , Dalbe et al. teaches that the crosslinking/curing catalyst may be chosen from titanium organic complexes (M1 of instant claim 11), or metal salts, particularly metal carboxylates of tin, **zinc**, iron, lead, barium, manganese, zirconium, and **mixtures** thereof (M2 of instant claim 11) (p. 11; bottom of p. 13-top of p. 14; top of p. 22). More specifically, Dalbe et al. further teaches that the crosslinking/hardening catalyst consists of a metal carboxylate, including zinc octoate (M1 of instant claim 11) (top of p. 22) **and/or** a titanium organic derivative (M2 of instant claim 11) (top of p. 14). While Dalbe et al. does not explicitly teach ratios of M1 and M2 which may be employed, the teaching of "and/or" by Dalbe et al. does suggest to a person having ordinary skill in the art that a mixture of the metal carboxylate catalysts and titanium catalysts can be added together. The most obvious ratio which would be immediately envisaged would be a mixture of

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zinc octoate and an organic titanium derivative in a 1:1 ratio. Further, the range of instant claim 11 of from 5 to 95% is so broad that nearly any selection of a catalyst mixture would encompass this range. Therefore, parameters α and γ are effectively taught by Dalbe et al. Further, a person having ordinary skill in the art would have been motivated to adjust the ratios of curing catalysts M1 and M2 in order to optimize the final properties of the composition, in light of the teachings of Dalbe et al.

With regards to parameter β , Dalbe et al. teaches that the catalyst can be added in a suitable amount, and further teaches this amount can be from 0.3-5 parts by weight based on the total number of parts of the composition. It is unclear whether Dalbe et al. explicitly teaches parameter β because of the number of variables that must be considered when comparing Dalbe et al. to instant claim 11. Specifically, the total parts of the compositions of Dalbe can be as low as ~105 total parts up to ~260 parts by weight (p. 22) which can have a large effect on the total parts by weight of catalyst. Further, Dalbe et al. teaches several catalysts which can have molecular weights as low as 171 (for example $\text{Ti}(\text{OMe})_4$) up to above 1000 [for example $\text{Ti}[(\text{OCH}_2\text{CH}_2)_2\text{OC}_{12}\text{H}_{25}]_4$]; this range of catalyst molecular weight will also have a significant effect of the total amount of catalyst that is added on a microgram/atom (micromole) basis. While Dalbe et al. does not clearly teach that the catalyst system can be employed in the manner presented by parameter β , the amount of added catalyst is a result-effective variable. The courts have stated that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art (i.e., does not require undue experimentation). *In re Aller*, 105 USPQ 233. “Discovering an optimum value of a result effective variable involves only routine skill in the art.” *In re Boesch*, 617 F.2d 272, 205 USPQ

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215 (CCPA 1980). Note too MPEP 2144.05 which states that “differences in concentration or temperature will not support the patentability of subject matter encompassed by the prior art unless there is evidence indicating such concentration or temperature is critical”. In the instant case, a person having ordinary skill in the art would have found it obvious to adjust the amount of the catalyst system as taught by Dalbe et al. and would have been motivated to do so in order to optimize the composition in terms of both economy (titanium catalysts are expensive for example) and optimization of the final physical properties.

Claim 13: Dalbe et al. further teaches that M1 can have the structural limitations of formula (V) of instant claim 13 and M2 can have the structural limitations of formulae (VI) and (VII) of instant claim 13 (pages 14, 21-22 and 35).

Claim 16: Dalbe et al. explicitly teaches that process for the preparation of the single component composition of instant claim 11 following the process of instant claim 16 (pages 28, preparation E).

Claims 17-18: Dalbe et al. further teaches that the hydroxylated precursor of instant claims 17 and 18 (p. 12 and p. 28, preparation E).

Claim 19: Dalbe et al. further teaches the functionalization catalysts of instant claim 19 (top of p. 19 and p. 28, preparation E).

Claim 20: Dalbe et al. teaches a non-yellowing elastomner composition capable of adhering to various substrates (p. 31).

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Allowable Subject Matter

Claim 12 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Specifically, Dalbe et al., which is believed to be the closest prior art reference, does not explicitly teach a binary curing catalyst system wherein parameter γ falls in the range of instant claim 12 (10-45%). It is believed that such a ratio would have been unobvious to a person having ordinary skill in the art given only the teaching that a mixture of two catalysts may be employed.

Relevant Art Cited

The prior art made of record and not relied upon but is considered pertinent to applicants disclosure can be found on the attached PTO-892 form.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert Loewe whose telephone number is (571) 270-3298. The examiner can normally be reached on Monday through Friday from 5:30 AM to 3:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on (571) 272-1302. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications

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may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/R. L./
Examiner, Art Unit 1796
11-Jan-08

/Randy Gulakowski/
Supervisory Patent Examiner, Art Unit 1796